

# Project Heat Flask

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## Overview

The goal is to design, build, and test a cheap device for measuring thermal conductivity and resistivity of fabrics.

## Materials

- Ruler
- Thermocouple sensor (wire lead)
- Vacuum flask
- Plastic wrap (Saran wrap)
- USB power source (battery or AC adapter)
- USB power meter
- An old USB cable (will be cut)
- A 1-Watt, 5-Volt heating element
- A 1-Watt, 5-Volt fan
- Wiring/breadboard/tape to connect the electronics
- A box fan or similar